

ABSTRACT

Efficient removal of mercury from the exhaust gases of an industrial process or combustion process can be achieved using an adsorbent that can be regenerated by a simple and efficient method. The mercury is contacted with a sorbent material, the sorbent material being hydrogen mordenite or hydrogen clinoptilolite, for adsorbing mercury and causing the mercury to react with the sorbent material to produce mercury-laden sorbent material. The mercury-laden sorbent material can be heated to a temperature of at least about 400 °C so as to remove mercury from the mercury-laden sorbent material and to regenerate the sorbent material to allow reusing of the sorbent material for mercury removal.